NORTHWEST CORRIDOR
Blue Line Extension to Schaumburg

Description of Alternatives

for the

Regional Transportation Authority
Phase II Alternatives Analysis

April 18, 2003

cta take it.

Chicago Transit Authority
Planning & Development

Contents

Overview

Market Targets

Transit Operating Schedules & Speeds

Line, Grade & Cross-Section Data

Station Definition, Feeder Bus & Station Access Assumptions

This plan takes advantage of the unique opportunities afforded by the speed, capacity and level of frequent service afforded by heavy rail rapid transit.

Furthermore, it leverages the O'Hare expansion plan to provide direct service between Chicago, the growing economic opportunities north and west of the airport, and, of course, the airport itself.

Finally, it provides two options for traveling between Schaumburg and the western access point of O'Hare. One follows the I-90 corridor and mix of land uses that have arisen along this important artery. The other seizes upon the new development opportunities that will be afforded by a completed western access roadway to O'Hare, linking this corridor with the Woodfield and Schaumburg areas.

Project Background

In April 2000 a study by the Regional Transportation Authority concluded that extension of the Chicago Transit Authority's Blue Line into the Northwest Corridor would move more people out of their cars – over 46,000 each day – and onto transit than any other investment.

The alignments tested in the Feasibility Study generally used the median of the I-90 Northwest Tollway, connecting with CTA's Blue Line rapid transit service at the Rosemont station. The ridership projections found that extension of the CTA's Blue Line into the Northwest Corridor was the most successful for moving people out of their cars and onto transit, with the highest number of total transit trips of any option. It was estimated that 46,600 new daily transit trips would be generated by the Blue Line extension.

In June 2002, the RTA requested the participation of the three service boards – CTA, Pace and Metra – along with the Illinois State Toll Highway Authority and the Northwest Municipal Conference of Mayors, in the Northwest Corridor Phase II Alternatives Analysis. Each service board was asked to develop a proposal. In September 2002 first presentations were made by CTA and Pace at a Public Agency Scoping Meeting, followed by public presentations by CTA and Pace during November 2002. The CTA Blue Line extension proposals described in this document are a result of this process and discussions with the other service providers and community representatives.

What is in this Document

a. Proposed Alignments

Since the Phase I Alternatives Analysis (Feasibility Study) was completed, Chicago's O'Hare Modernization Program has created new opportunities to better serve the Northwest Corridor from the Western Terminal of O'Hare airfield, allowing for a through (transfer-free) trip. The relationship between CTA's proposal and the O'Hare Modernization Program is described in detail on the following page.

From the western edge of the Airport property, CTA proposes two alternative alignments for the Blue Line to serve the Northwest Corridor:

North Option The extended Blue Line could proceed along a northerly alignment, within the proposed O'Hare Western Bypass corridor and within or near the existing Northwest Tollway corridor.

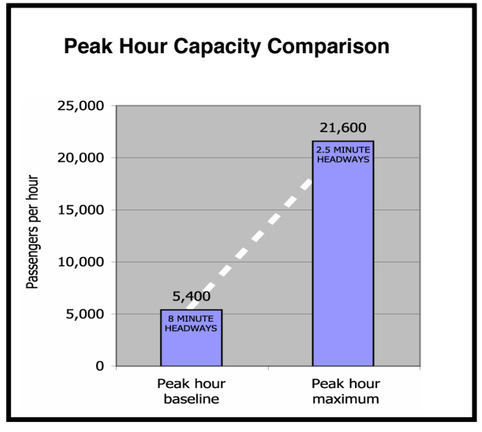
South Option The extended Blue Line could proceed along a southerly alignment, within the proposed Elgin-O'Hare Expressway corridor and within or near the existing I-290 corridor.

Both alignments serve Woodfield Mall and terminate adjacent to the proposed Schaumburg Convention Center with a shared transit terminal designed to accommodate Pace Bus Rapid Transit feeder services along I-90 and I-290/Route 53.

The capital costs and ridership potential for both the North Option and the South Option are expected to be comparable. The primary differences between the proposed alignments are the potential for future transit-friendly development adjacent to the new stations and the ability to effectively accommodate transit feeder service.

b. Service and Operating Plans

The introduction of CTA heavy rail service in the Northwest Corridor will present a significant opportunity to develop an intensive local intermodal transit system comprising feeder bus connections and frequent rail service that can be readily tailored to meet travel demand. The Blue Line extension offers an unparalleled ability to accommodate ridership growth with high frequency, high capacity service. Service levels can be adjusted to meet demand with a total capacity of up to 600 trains per day. The proposed CTA extension will be designed to accommodate trains of up to 10 cars in length. The CTA Blue Line operating plan in the Northwest Corridor is flexible enough to accommodate traffic levels ranging from a minimum of 5,400 customers per hour per direction up to a maximum of 21,600 customers per hour per direction. Service and operating issues are detailed in the Operating Plan section of this report.



New Opportunities for Transit: Relationship to the O'Hare Modernization Program

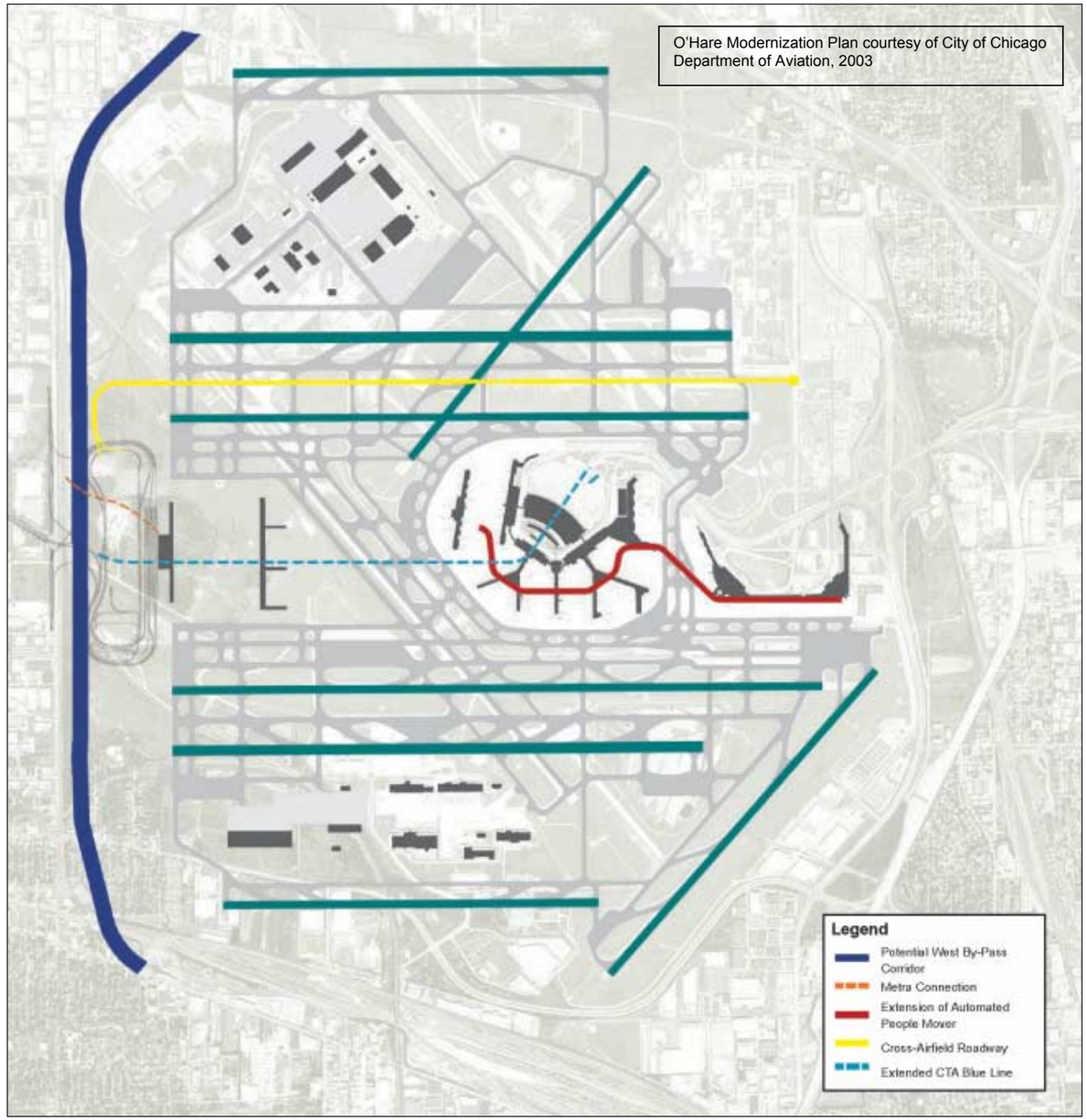
CTA's current proposal for extending rapid transit service to the Northwest Corridor overcomes several shortcomings in the conceptual plan of the Northwest Corridor Transit Feasibility Study of April 2000. Most notably, the April 2000 plan called for the creation of a new CTA Blue Line branch that would diverge from the existing Blue Line at Rosemont. This would have ultimately required a complex train routing pattern with some Blue Line trains serving O'Hare, and others serving the Northwest Corridor. Furthermore, under the April 2000 proposal, transit trips from the Northwest Corridor to O'Hare would have required changing trains at Rosemont to reach the airport terminal station.

The O'Hare Modernization Program solved these problems by creating the opportunity to *directly* link O'Hare Airport with the Northwest Corridor via the CTA Blue Line. The O'Hare Airport Layout Plan submitted for approval to the Federal Aviation Administration in December 2002 allows for CTA's Blue Line tracks to be extended westward from the current O'Hare terminus to the western edge of the airport property, as shown to the right. This extension is possible because the O'Hare Modernization Program includes the relocation of the existing northwest-southeast runway to an east-west orientation. Below-ground construction of the Blue Line extension through the Airport property would be scheduled to coincide with corresponding runway and taxiway improvements at the ground level.

This modification to the Feasibility Study's heavy rail alignment will provide a fast, convenient, one-seat connection between the Northwest Corridor, O'Hare Airport, and Chicago. In addition, the Airport Layout Plan makes provision for the O'Hare Western Bypass corridor to be developed as a multi-modal facility, with accommodation for existing freight railway tracks as well as future Metra tracks, highway lanes, and CTA tracks (if the North Option is chosen). The proposed confluence of CTA and Metra tracks at the western approach to O'Hare would also allow for convenient and efficient transfer connections between CTA's Blue Line extension, serving the Northwest Corridor and Chicago, and several Metra lines, serving suburbs to the north and west. In addition, CTA's proposal allows for the Blue Line to serve the new western terminal that is part of the O'Hare Modernization Program with the potential for a station with direct access to the new terminal.

Relationship to the Federal Transit Administration's New Starts Program

This report responds to RTA's request to provide information on certain product requirements to advance the local decision-making process. It should be noted that this information does not supplant the Federal Transit Administration's New Starts requirements, including specific steps necessary to complete Alternatives Analysis requirements.



Market Targets

Market Segments

CTA Rapid Transit in the Northwest Corridor is targeted at several markets. These include, broadly, the work commute market; the entertainment/shopping market; and convention/travel market.

The commute market is expected to be the primary draw for CTA's Blue line extension, by providing a new option for these trips into Chicago and by connecting high-density neighborhoods of Chicago – particularly the city's northwest side – with the employment rich areas of Elk Grove Village, Rosemont, Des Plaines, Arlington Heights, Rolling Meadows and Schaumburg. Employers likely to be well-served include airlines and aviation-logistics and support businesses neighboring O'Hare; SRDS; Pepsi; Sears; and Motorola; as well as Woodfield Mall, IKEA and surrounding retail. By delivering 24-hour service, the commute market will include 8:00am-5:00pm office building commuters, first-shift (day) line and support employees, second-shift (evening) retail and industrial employees, and third-shift (overnight) industrial, maintenance, security and janitorial employees. Similarly, some NW Corridor residents working at these same employment sites will also be drawn to the frequent rapid transit proposed.

In addition to this, the retail stores at and around Woodfield Mall are expected to draw shoppers onto transit west from Chicago, Park Ridge, DesPlaines and other near-in municipalities. Adding moviegoers to this group, travel demand is expected to span from 1000h to 2200h.

Finally, CTA expects to capture a portion of the O'Hare originating or destined traffic to and from the northwest communities; the employment, shopping and entertainment attractions listed above; and proposed convention center in Schaumburg. The Blue Line extension would link the existing Rosemont Convention Center and concentration of hotels with the Woodfield and Schaumburg destinations. Hours of demand would span early-morning to late-evening.

Design Approach

a. Alignment

The alignment alternatives for CTA rapid transit consider proximity to major traffic generators and are configured to provide the fastest possible service. Extension of the existing Blue Line provides direct service to and east of O'Hare without the need to transfer.

b. Station Character

Station plans will be coordinated with major traffic generators and the arterial street system, providing links to other parts of the corridor and region. Station design will maximize intermodal connectivity by providing off-street bus facilities with direct and easy bus-rail transfer paths, appropriate supply of park and ride to match demand, pick-up and drop-off areas for taxi and autos, and development of pedestrian/bicycle connections to the nearby community.

c. Transit Nodes

Station location and design will develop a series of transit nodes along the corridor that will help with both bus-to-bus and bus-to-rail transfers at key locations. This will facilitate many more travel options for people in this area. Station development in conjunction with land use planning initiatives in the corridor will create new transit-friendly development adjacent to the stations. The terminal station at the Schaumburg Convention Center provides a unique opportunity to integrate CTA rail service with Pace BRT service operating from the west in the I-90 corridor, and in the north-south I-290 corridor.

Transit Operating Schedules & Speeds

Operating Schedules
Operating schedules can readily be tailored to meet demand. The base assumption is that during peak periods every other Blue Line train would continue west of O'Hare to Schaumburg-Convention Center. During off-peak periods, all trains would operate through O'Hare.

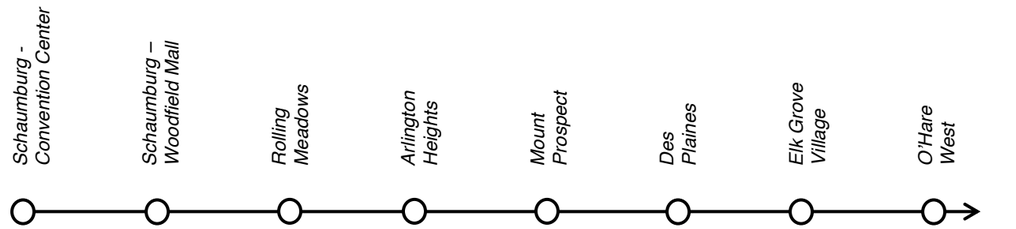
a. Peak service
- 8-10 minute headways

b. Off-peak service
- 8 -10 minute headways

c. Span of Service
- 24-hours/day
- 7 days/week

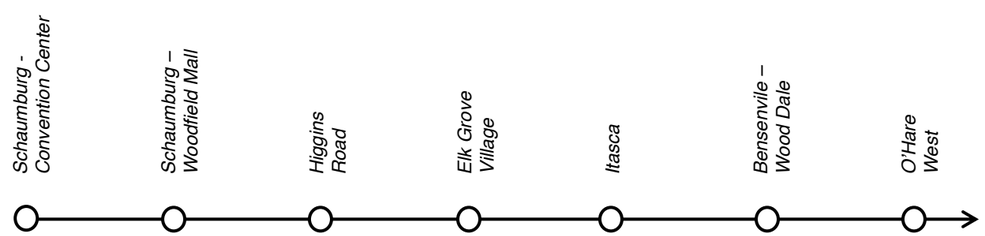
Operating Speeds & Travel Times
Maximum operating speed on the Blue Line extension will be 70 mph.

a. **North Alignment** – Travel time and distance



TIME	**2.75**	**2**	**2.75**	**2**	**1.5**	**2.75**	**1.75**	**[15.5 minutes]**
DISTANCE	**1.18**	**1.04**	**2.09**	**1.36**	**1.4**	**2.24**	**1.26**	**[10.56 miles]**

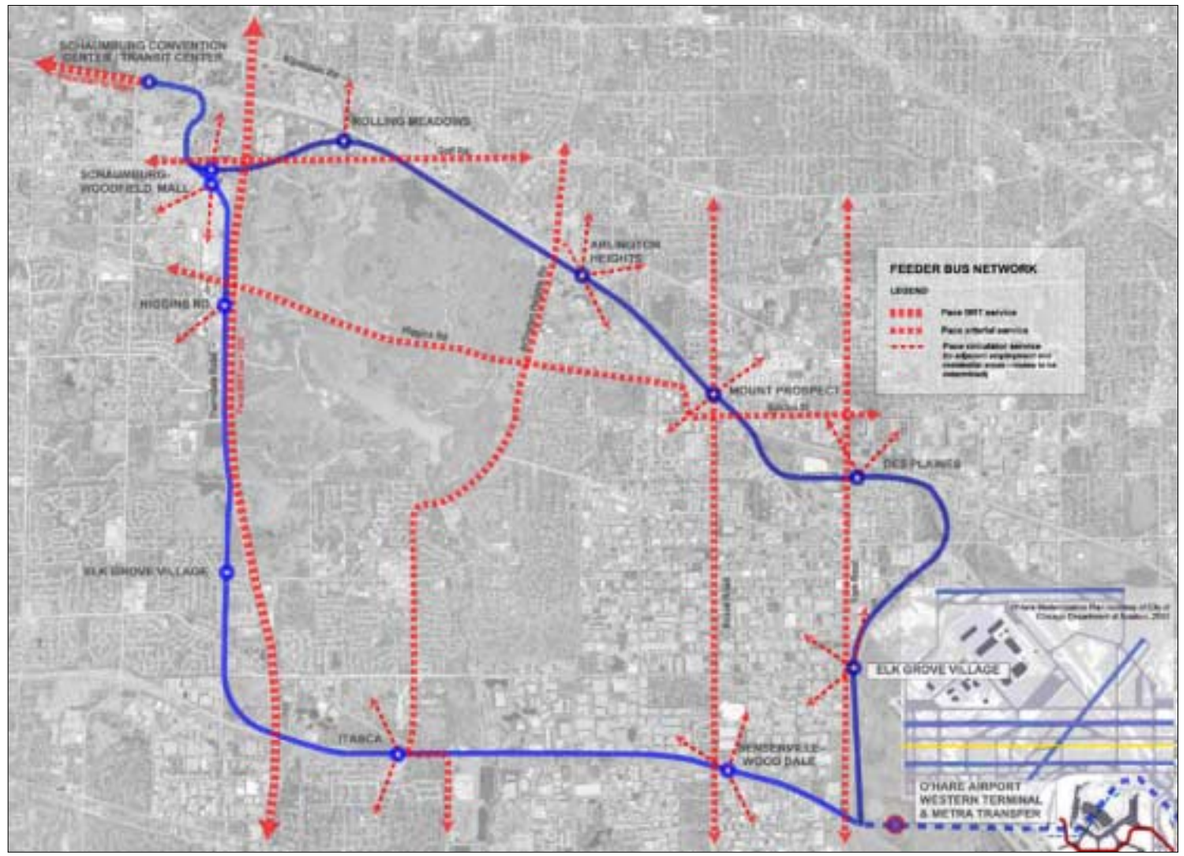
b. **South Alignment** – Travel time and distance



TIME	**2.75**	**2**	**2.75**	**3**	**2.5**	**2**	**[15 minutes]**
DISTANCE	**1.22**	**1.02**	**2.09**	**2.39**	**2.5**	**1.09**	**[10.31 miles]**

Feeder Bus Network
It is assumed that Pace's Vision 2020 network of local, express and BRT routes would be coordinated as feeder services to the Blue Line extension.

Station plans incorporate bus transfer facilities and include information on assumptions for local circulation and arterial feeder route service at each station. The Schaumburg Convention Center terminal station includes facilities to intercept BRT service from the west on I-90 and north-south BRT service on I-290.



Conceptual alignment and station plans are shown on the following pages, utilizing base aerial photomaps provided by the RTA. The aerials are only as accurate as the land uses patterns in place at the time the aerial photographs were taken. Major land use changes that have been constructed since the photographing of these aerials have been noted.

The alignment and station plans should not be considered final; they are provided for an understanding of how a Blue Line extension could be achieved and operated, and for preliminary cost estimation. As discussed in the Overview section, the Schaumburg Blue Line extension has been planned with the O'Hare Modernization Program. The final alignments near the airport will change from what is shown, as plans for access improvements are developed; they are shown for cost estimation purposes only.

Station locations have considered site conditions, local development, arterial access, and the work performed in the Land Use Study by the Northwest Municipal Conference.

Two alternate alignments are provided:

North Alignment, generally along I-90.

South Alignment, generally along Thorndale Avenue and Rohlwing Road.

Key Assumptions

The project start point is the west side of O'Hare Airport.

The right-of-way along I-90 is assumed to be available for the project. Locations where the proposed alignment requires land acquisition outside of public rights-of-way can be identified on the plans. Utility, survey and engineering data, beyond what can be seen on the aerial photomaps, was not made available during this phase of the study.

The western terminal is adjacent to the proposed Schaumburg Convention Center. The station facility and tracks are proposed on aerial structure over the center of I-90.

Major rail car maintenance and storage is assumed to occur at existing Blue Line yard facilities. A light maintenance facility could be constructed as part of the Schaumburg Convention Center terminal.

The plans have not been developed to the level to site traction power substations.

Standard CTA automatic cab signal system should be assumed, with bi-directional operation. Emergency crossovers should be located every mile, and include one 1,400-foot emergency center track for temporary storage of defective and work equipment.

The Schaumburg – Convention Center station includes two, 10-car train turnback tracks, extending to the west of the station platform.

Typical cross sections representing CTA design criteria are provided at the end of this section. Maximum vertical grade is 4%.

SCHAUMBURG CONVENTION CENTER / TRANSIT CENTER

Pace BRT to Elgin

Algonquin Rd

ROLLING MEADOWS

Golf Rd

SCHAUMBURG-WOODFIELD MALL

ARLINGTON HEIGHTS

Arlington Heights Rd

HIGGINS RD.

Higgins Rd

Thorndale Road

Pace BRT on I-290

MOUNT PROSPECT

Oakton St

DES PLAINES

ELK GROVE VILLAGE

Busse Road

York Road

ITASCA

BENSENVILLE-WOOD DALE

O'Hare Modernization Plan courtesy of City of Chicago Department of Aviation, 2003

ELK GROVE VILLAGE

O'HARE AIRPORT WESTERN TERMINAL & METRA TRANSFER

DATE: 4/01/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AM	RTA AERIAL MAP

RTA AERIAL PLAN - NORTHWEST CORRIDOR PHASE II ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT FACILITIES PLANNING

NORTH & SOUTH ALIGNMENTS

DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

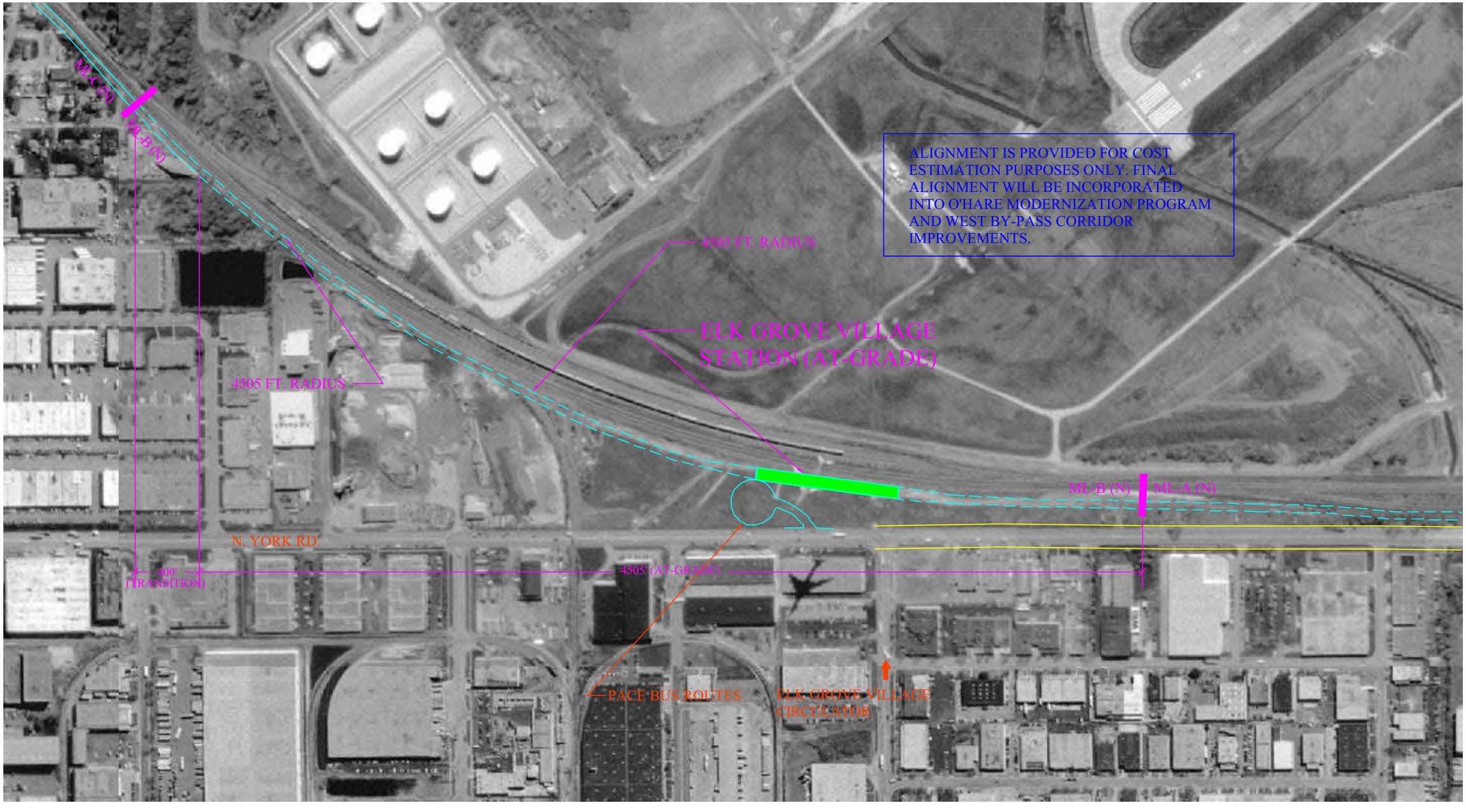
NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE A-A (ML A-A)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_A-C (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

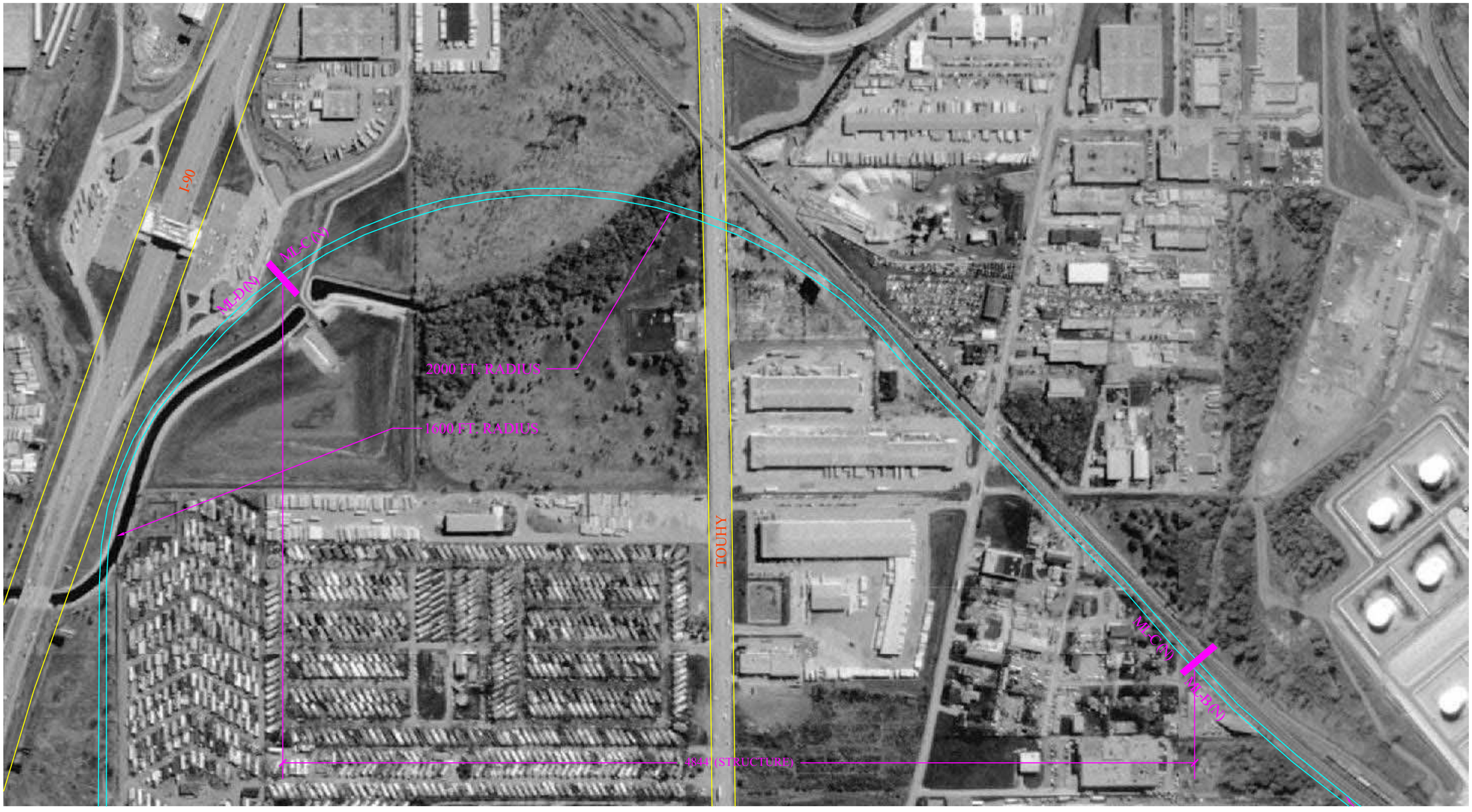
NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE B-B (ML B-B)

FILE LOCATION S:\Facdan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_A-C (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

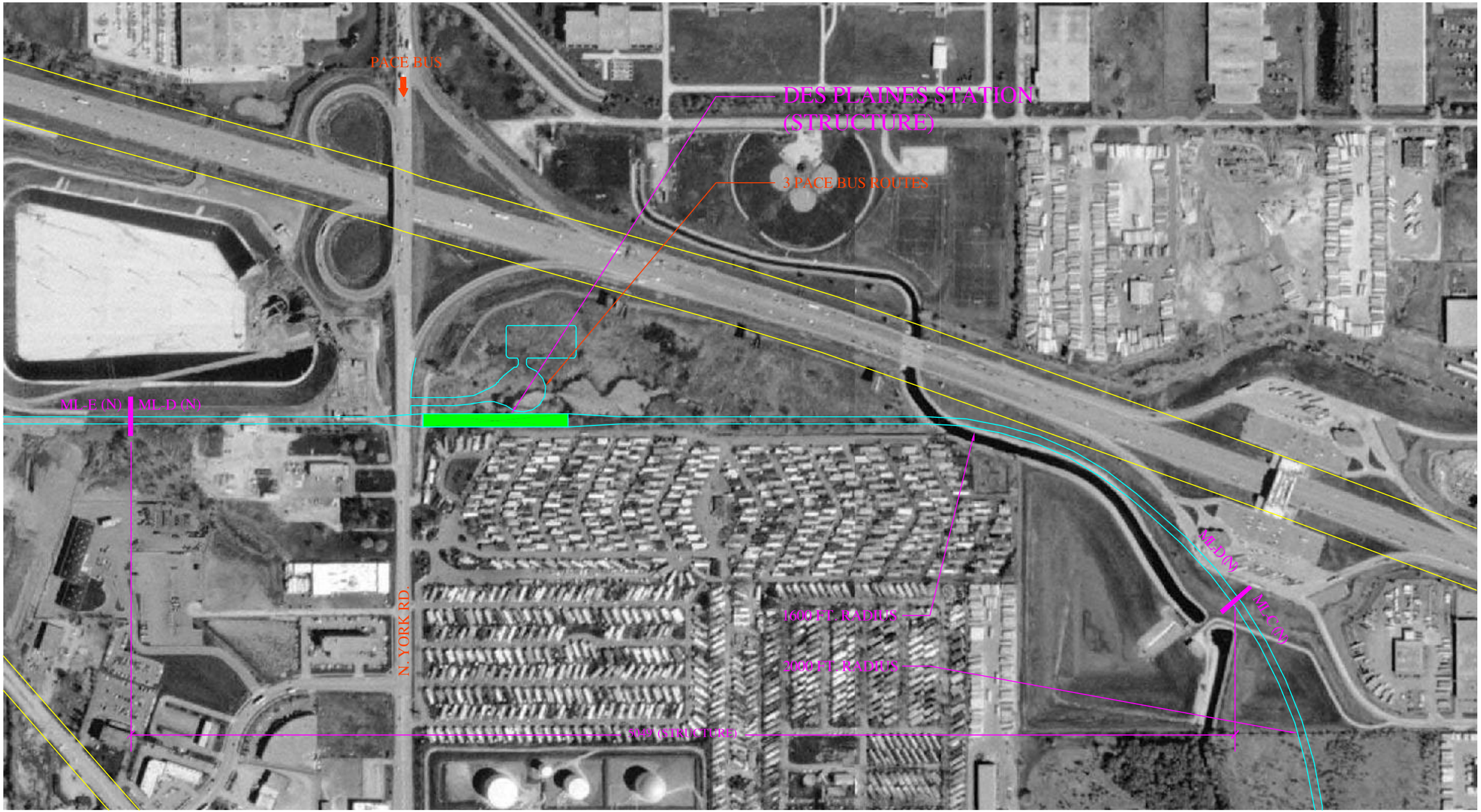
REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE C-C (ML C-C)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_A-C (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

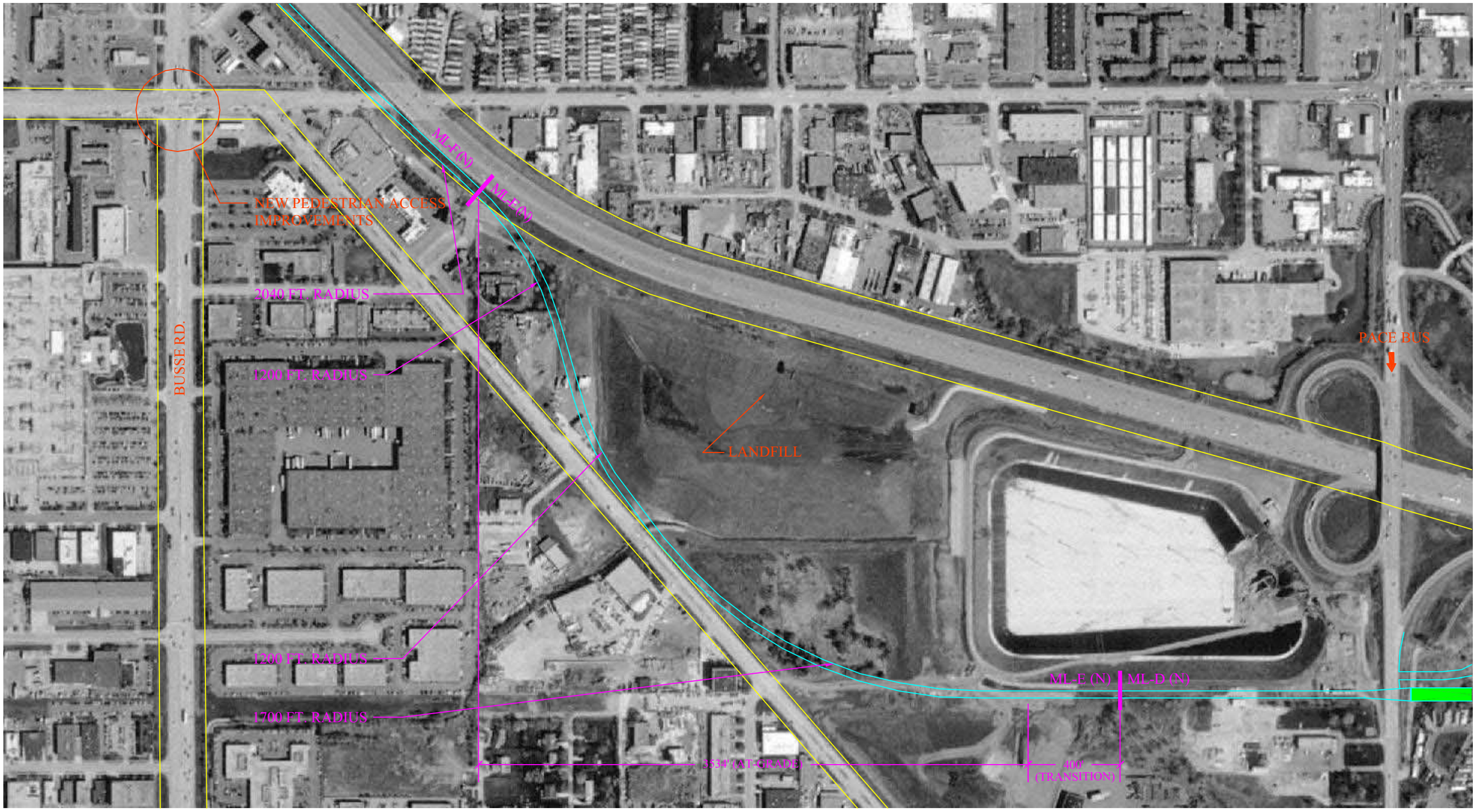
REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE D-D (ML D-D)

FILE LOCATION S:\Feaplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_D-E (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 200 400 800 FEET

NORTH

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

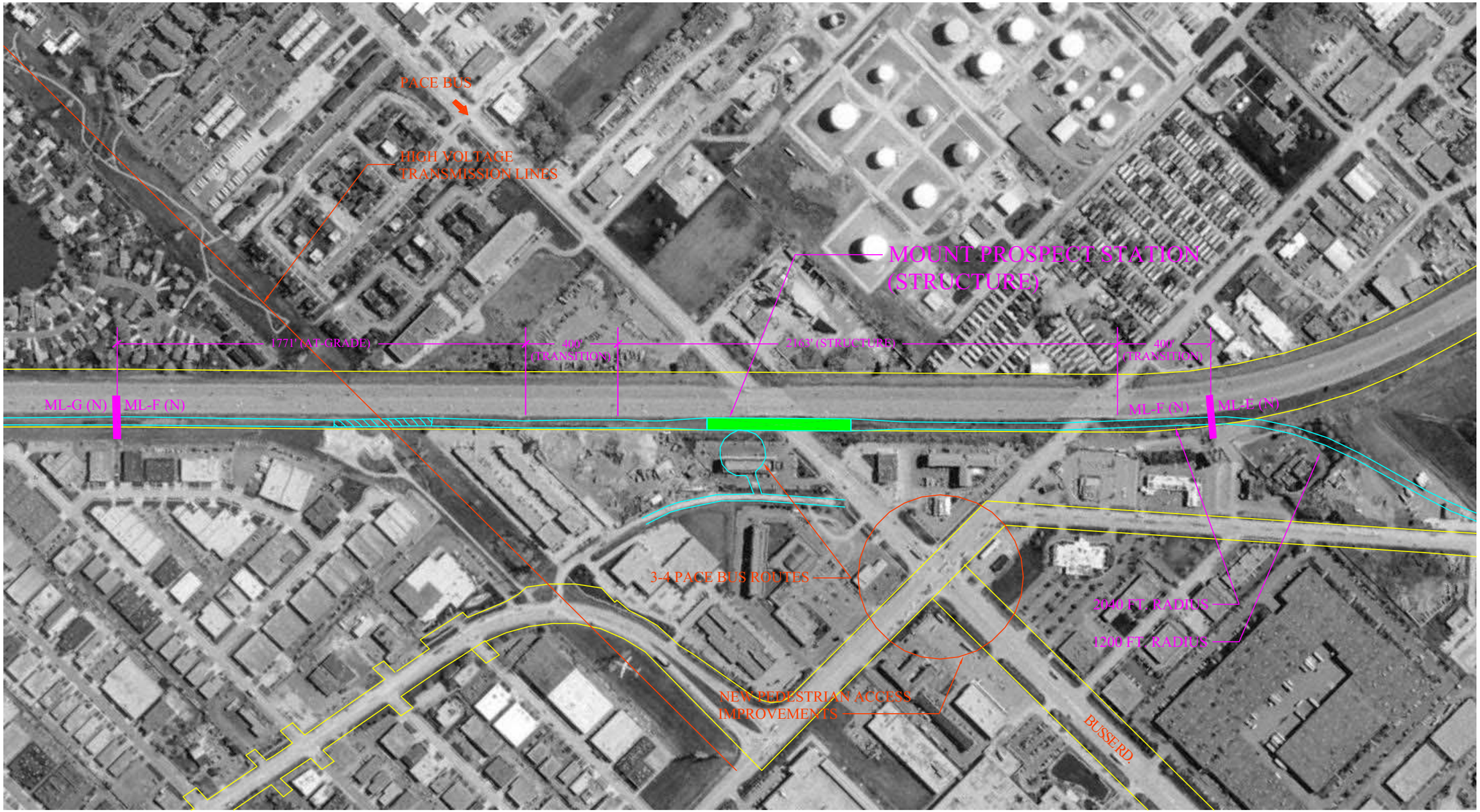
NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE E-E (ML E-E)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_D-E (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE F-F (ML F-F)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_F-G (N).dwg

DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE G-G (ML G-G)

FILE LOCATION S:\Faqtan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_F-G (N).dwg

DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 800 FEET

REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE H-H (ML H-H)

FILE LOCATION S:\Faclpln\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_H-J (N).dwg

DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE J-J (ML J-J)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_H-J (N).dwg

DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

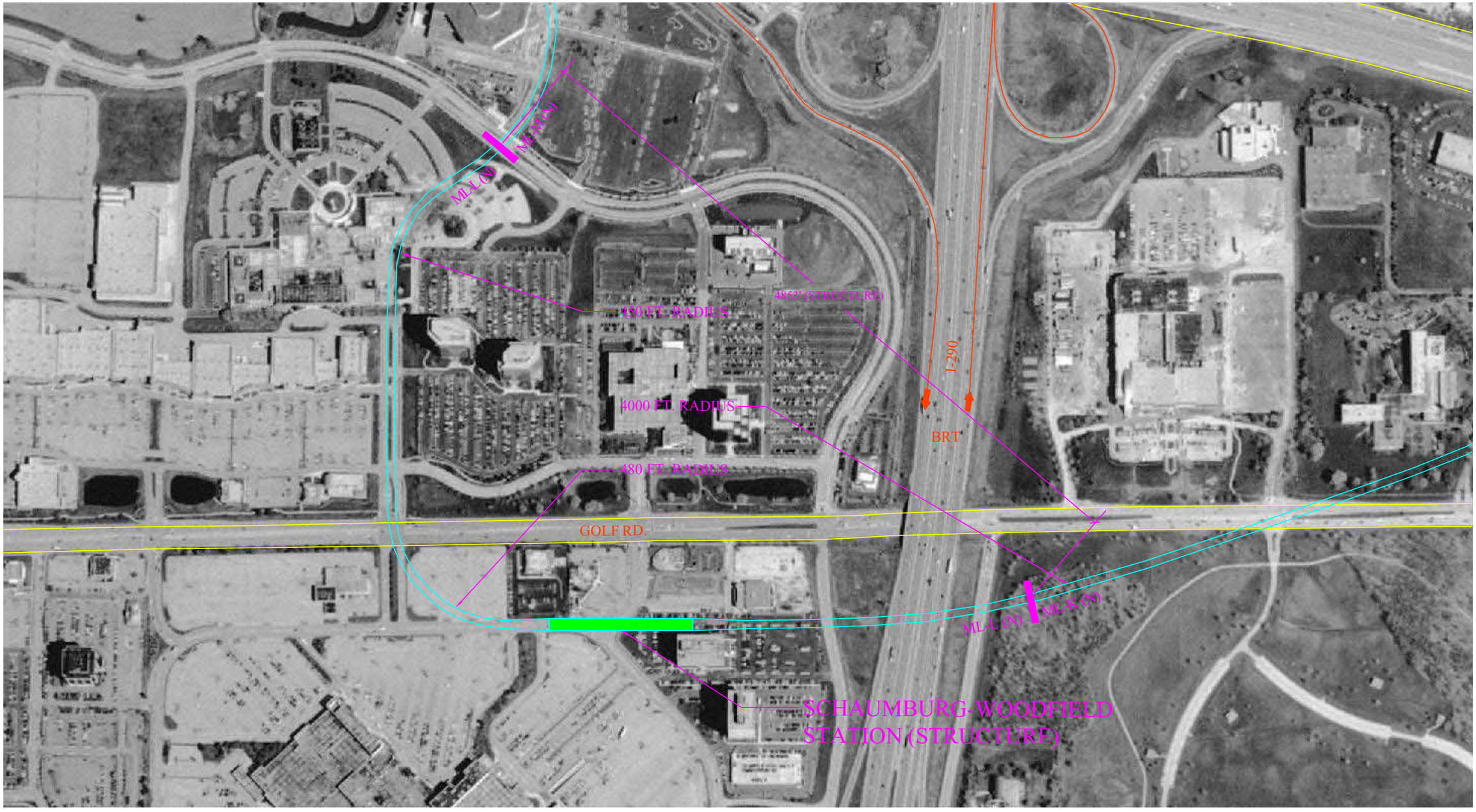
REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE K-K (ML K-K)

FILE LOCATION S:\Faceplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_K (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

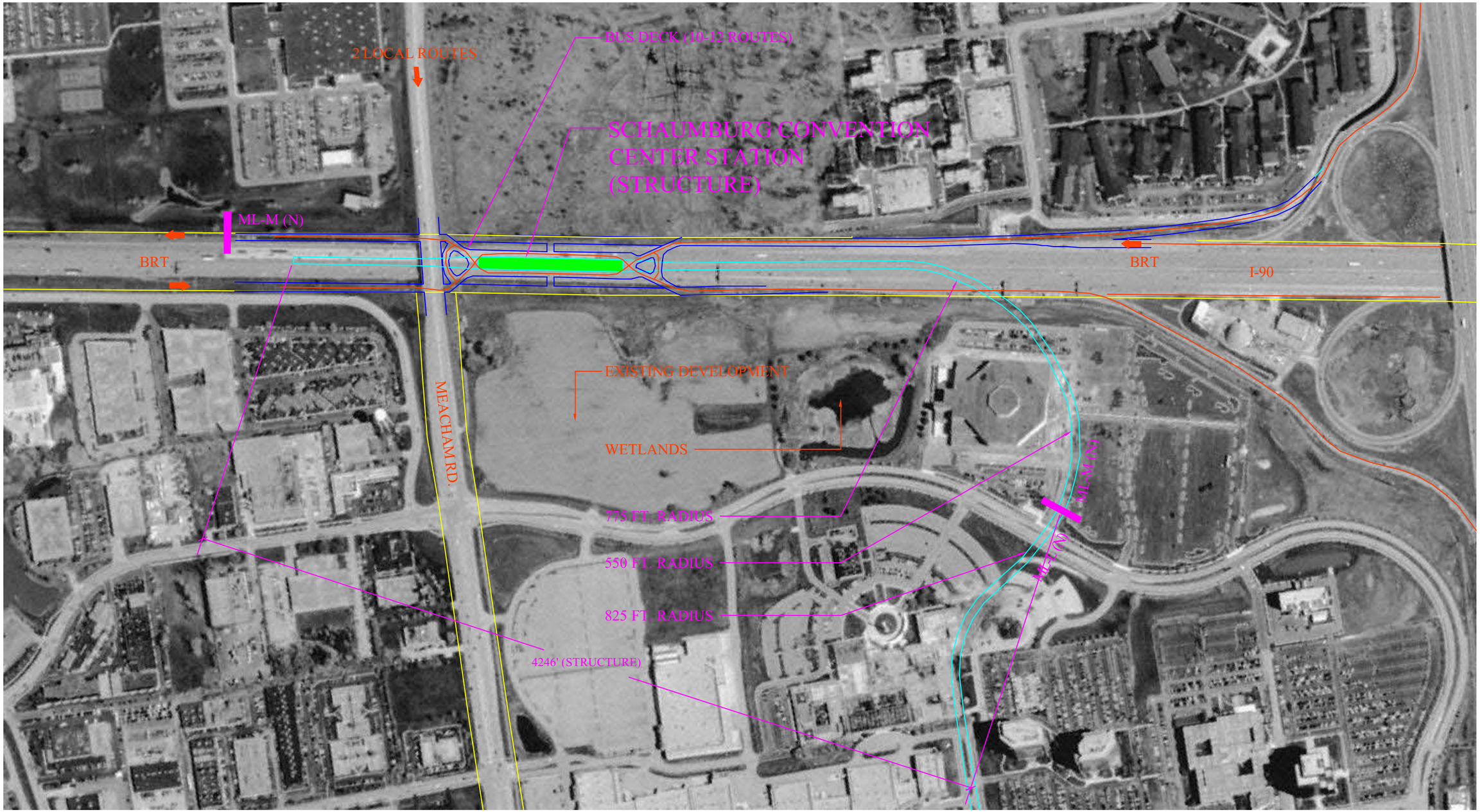
NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE L-L (ML L-L)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_L (N).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE M-M (ML M-M)

FILE LOCATION S:\Facplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_M (N).dwg

DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:		
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE A-A (ML A-A)

FILE LOCATION S:\Faqtpn\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_A-B (S).dwg

DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:

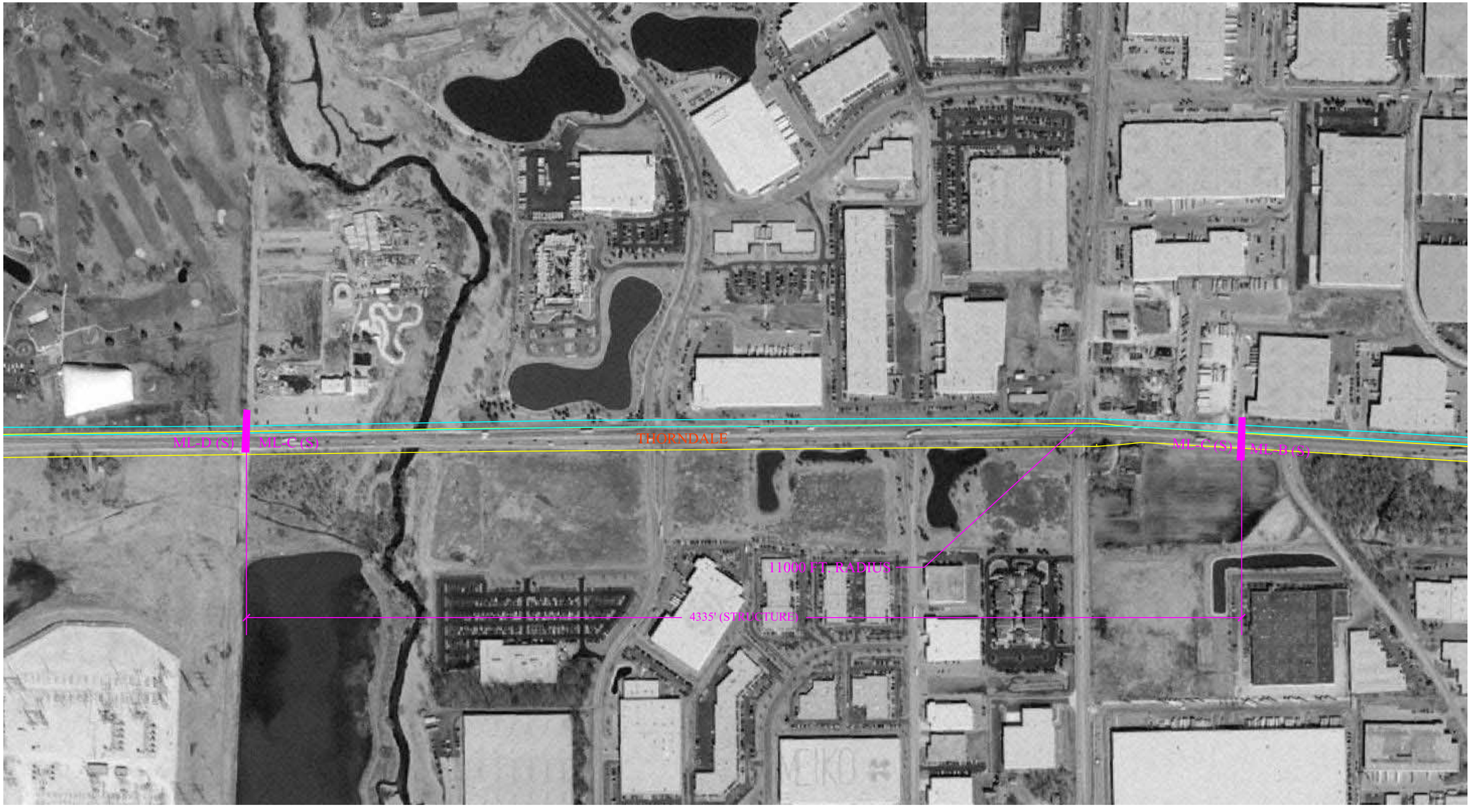
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE B-B (ML B-B)

FILE LOCATION S:\Faceplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_A-B (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

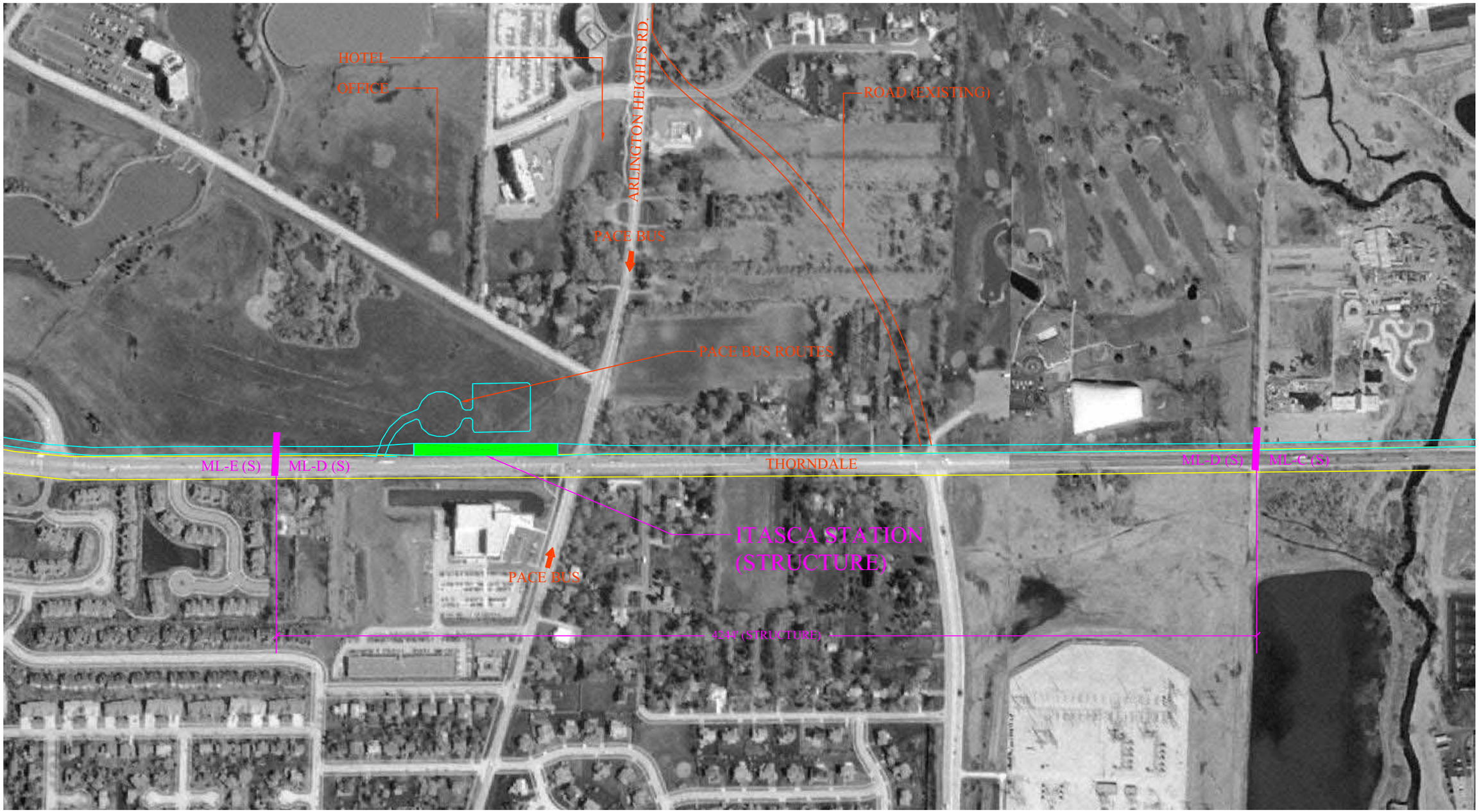
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE C-C (ML C-C)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_C-D (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 300 400 FEET

REVISIONS:

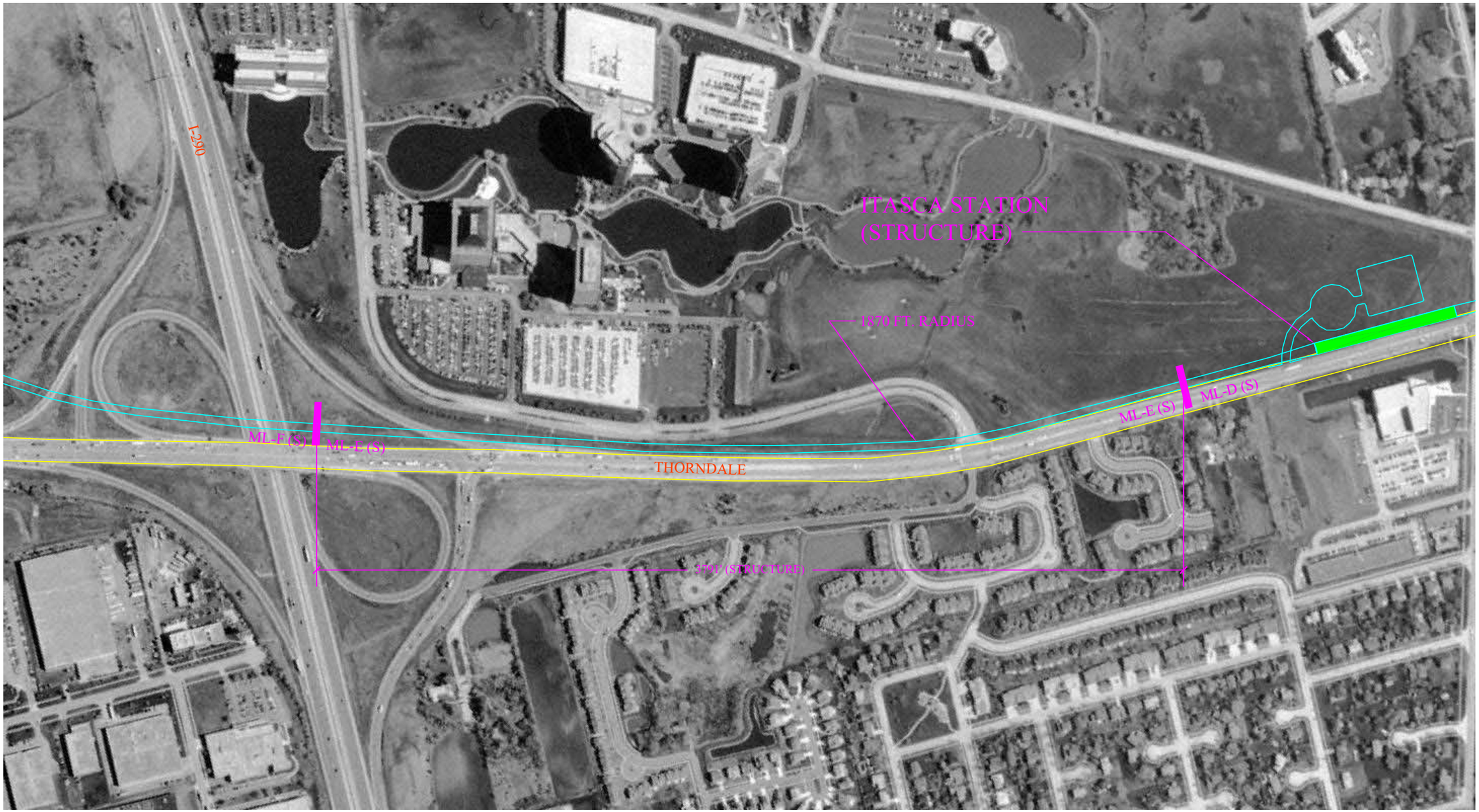
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE D-D (ML D-D)

FILE LOCATION S:\Faceplan\Projects\Rolls\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_C-D (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

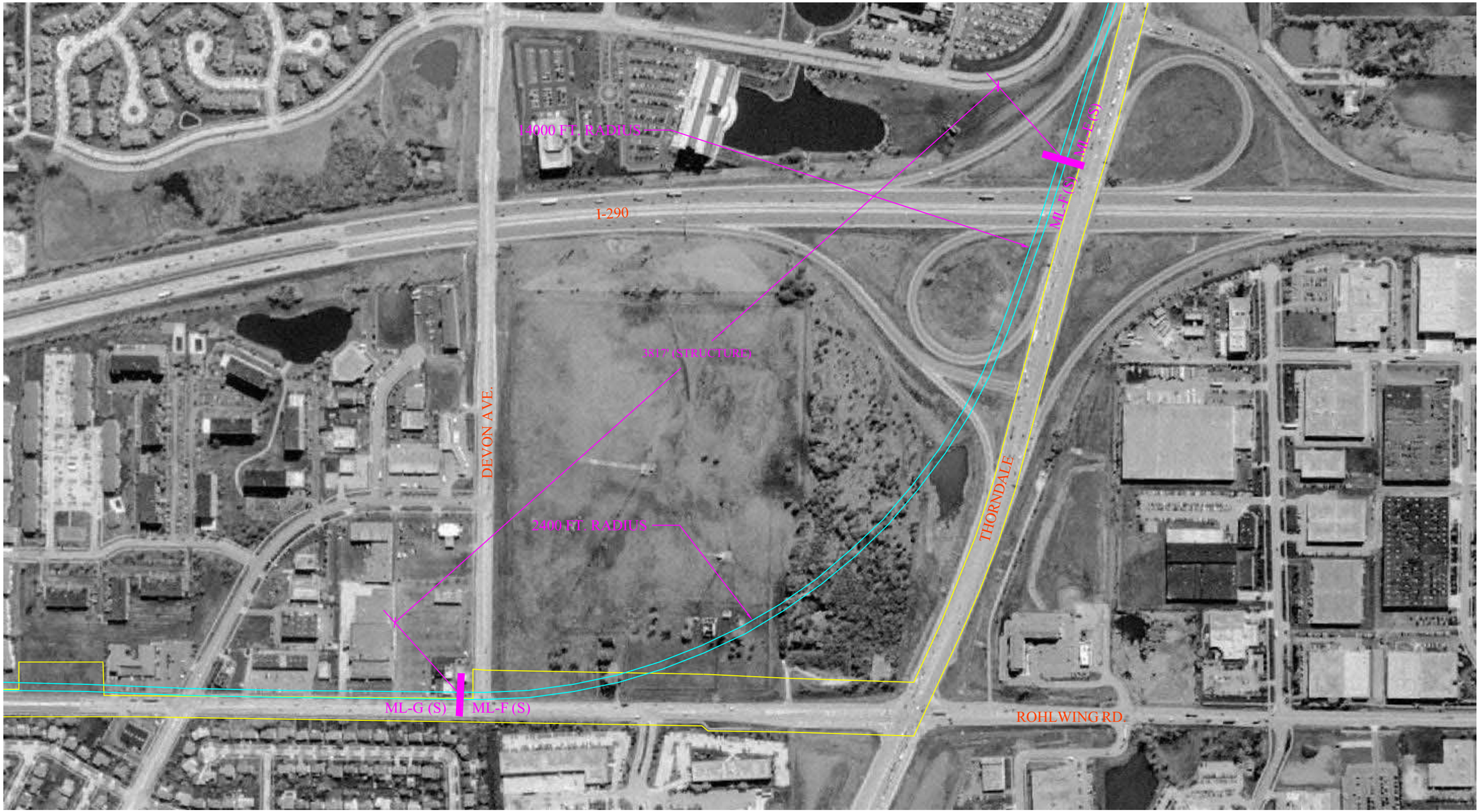
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE E-E (ML E-E)

FILE LOCATION S:\Faqtan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_E (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:

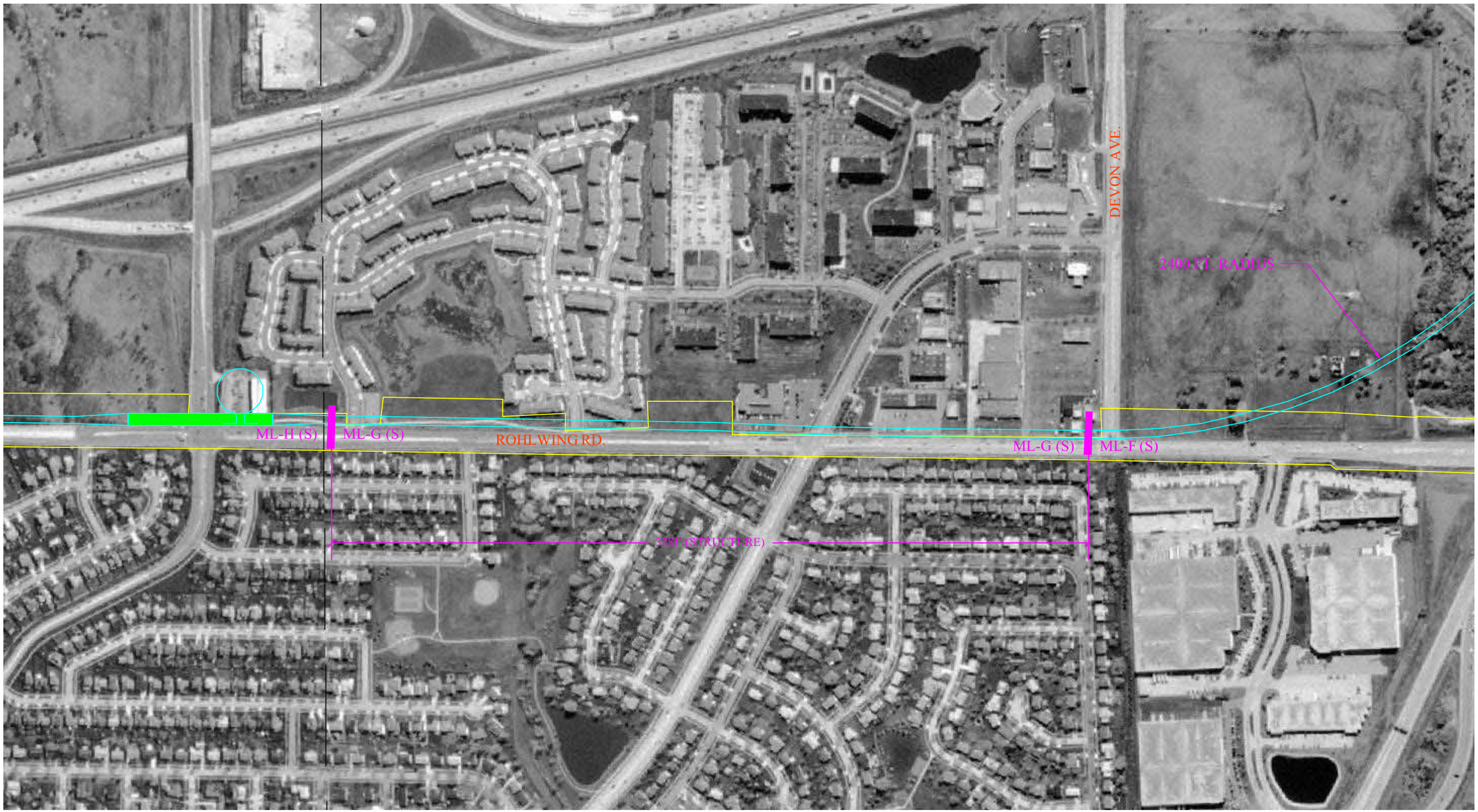
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE F-F (ML F-F)

FILE LOCATION S:\Fapion\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_F-G (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE G-G (ML G-G)

FILE LOCATION S:\Faqtan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_F-G (S).dwg

DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE H-H (ML H-H)

FILE LOCATION S:\Faqtpn\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_H-K (S).dwg

DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 100 200 400 400 FEET

REVISIONS:

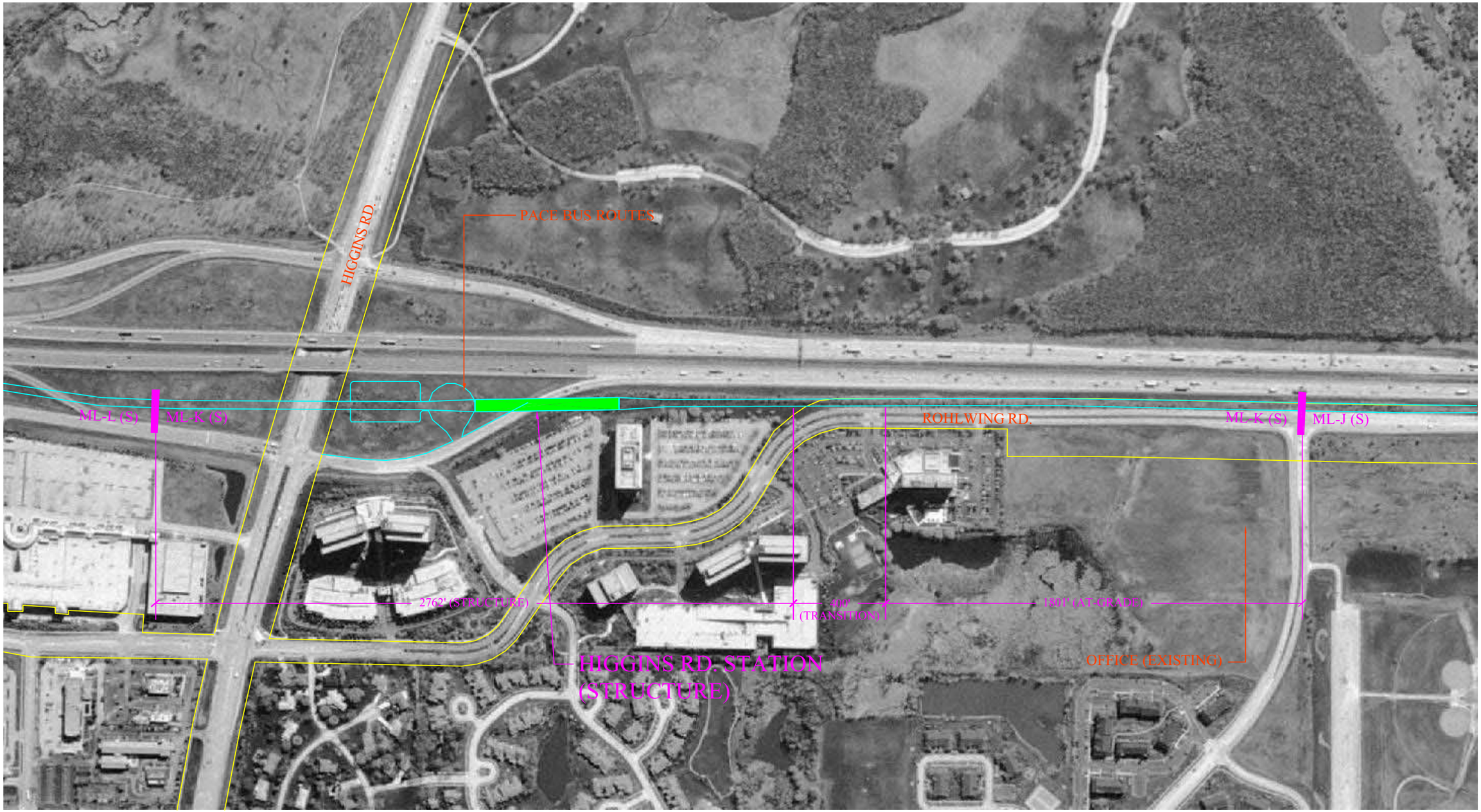
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE J-J (ML J-J)

FILE LOCATION S:\Facplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_H-K (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 200 400 800 FEET

NORTH

REVISIONS:

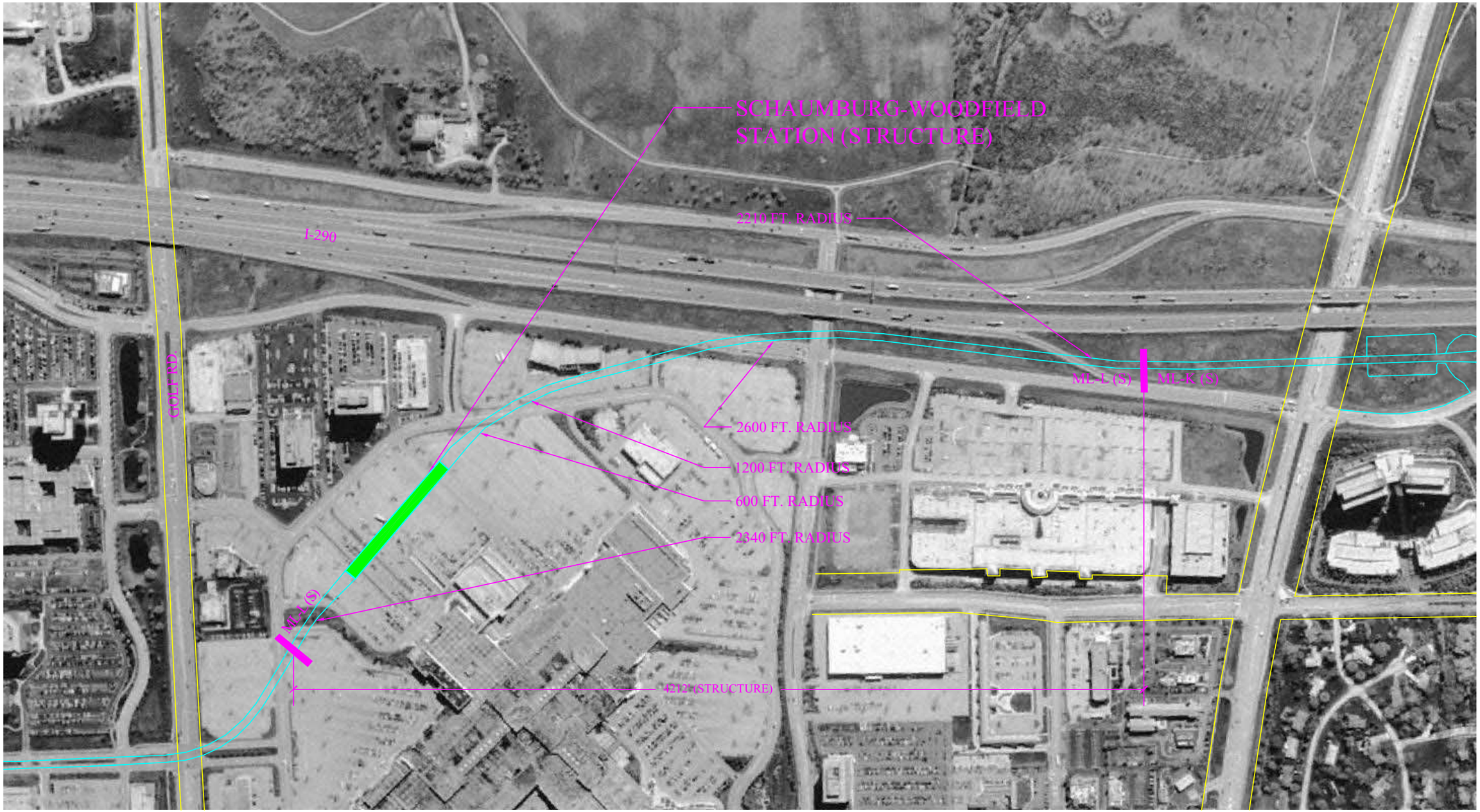
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE K-K (ML K-K)

FILE LOCATION S:\Faqtan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_H-K (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

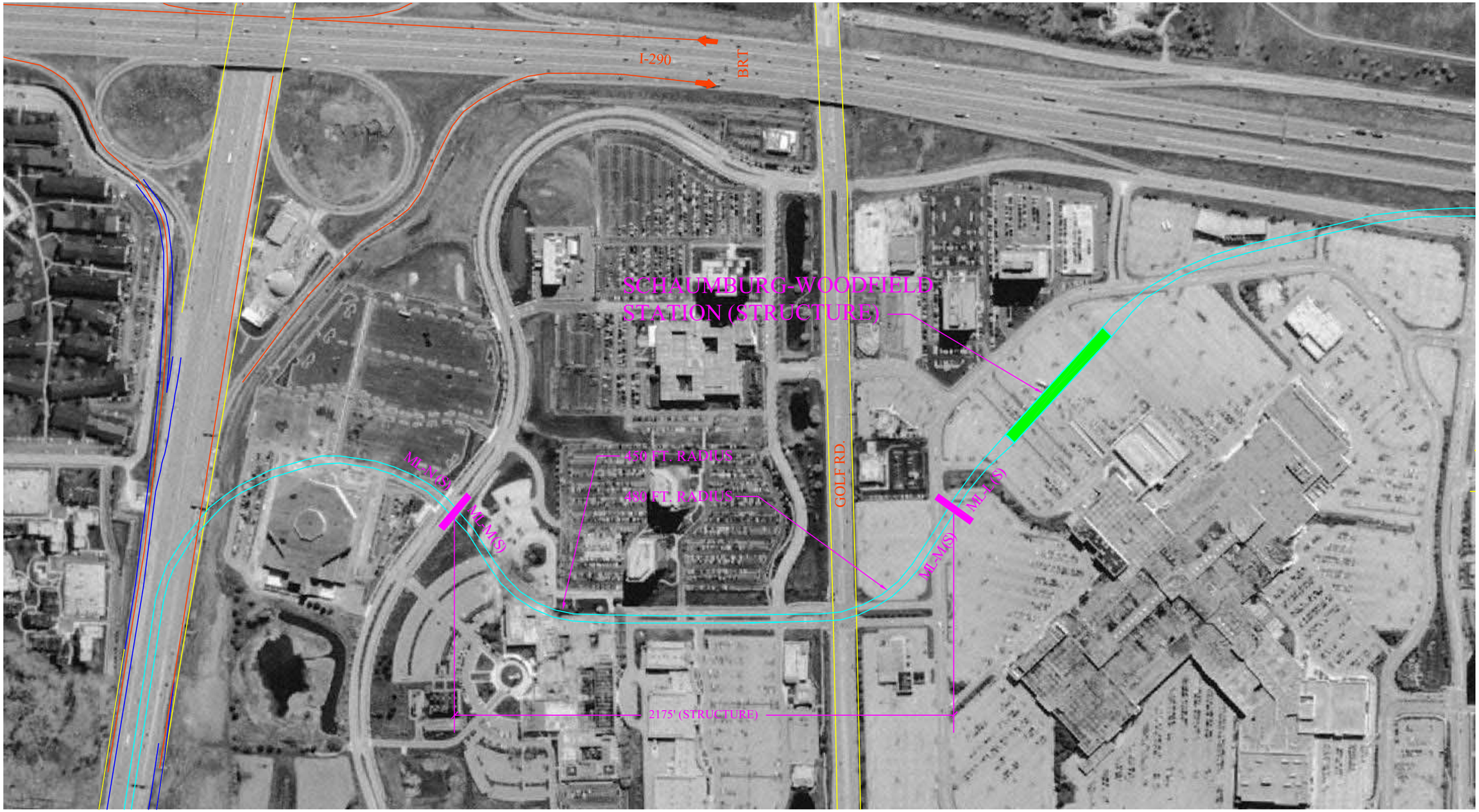
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE L-L (ML L-L)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_L (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

NORTH

0 200 400 800 FEET

REVISIONS:

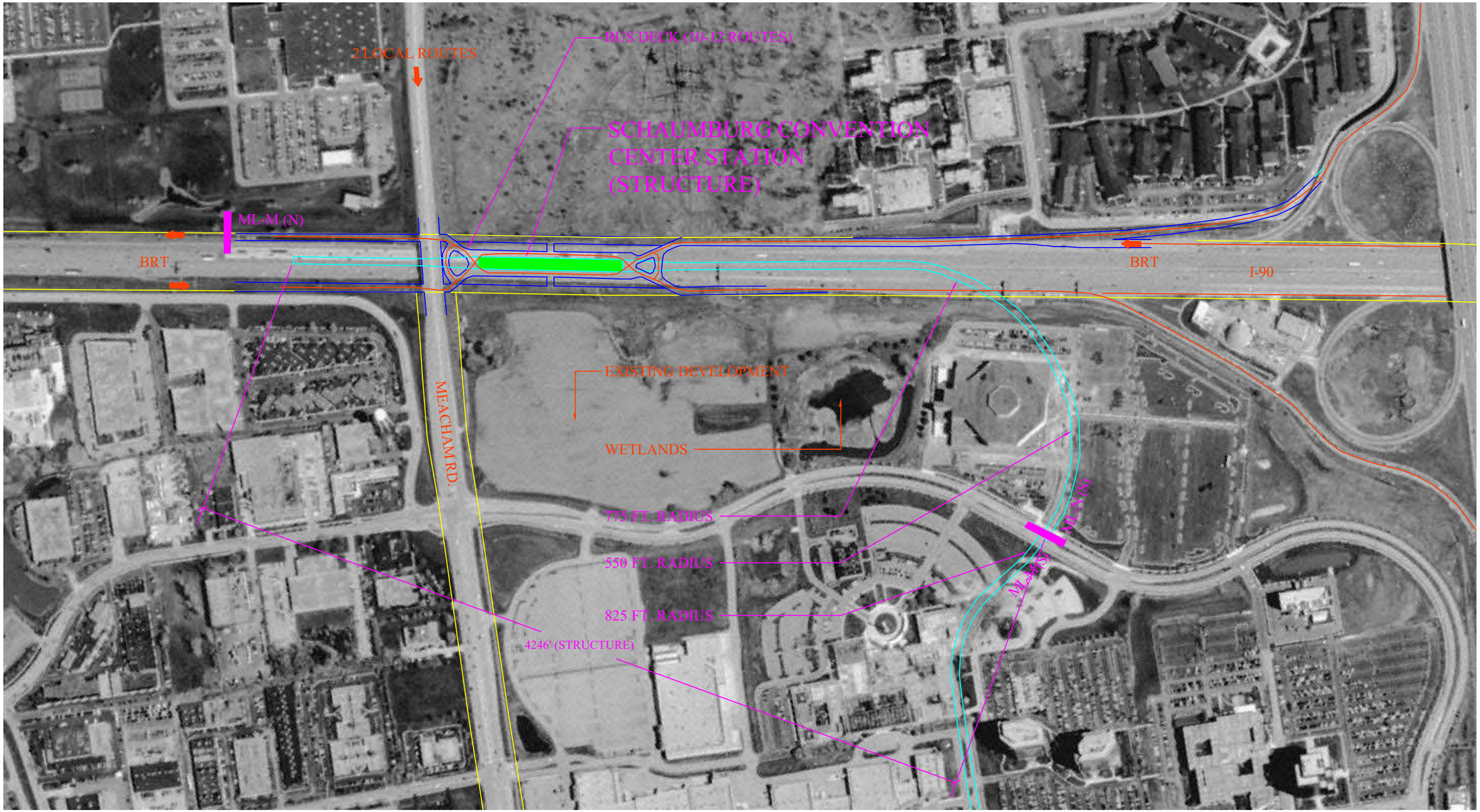
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE M-M (ML M-M)

FILE LOCATION S:\Faqplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_M (S).dwg



DATE: 4/01/03

SCALE: 1" = 400'

0 100 200 400 400 FEET

NORTH

REVISIONS:

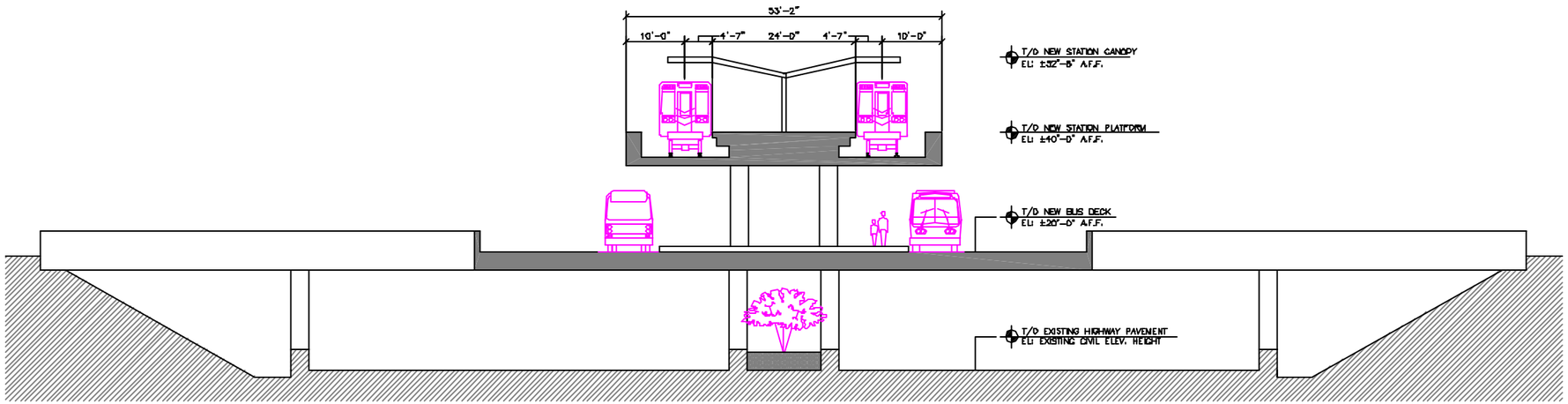
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SOUTH ALIGNMENT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

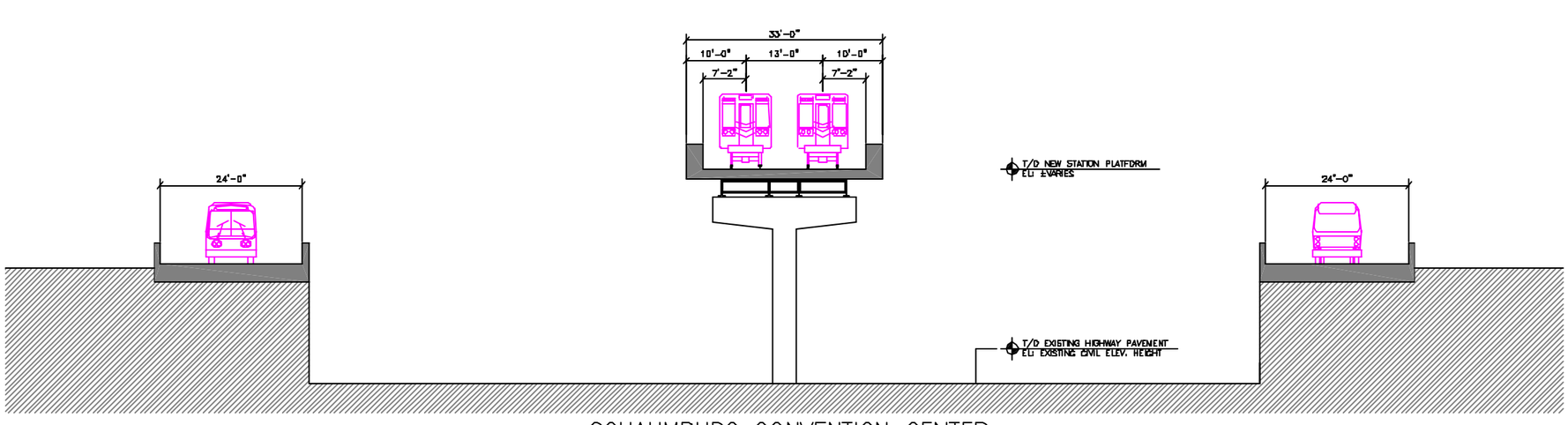
PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MATCHLINE N-N (ML N-N)

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\11x17_N (S).dwg



SCHAUMBURG CONVENTION CENTER



SCHAUMBURG CONVENTION CENTER
(APPROACH TO STATION WITH BRT FEEDER RAMP)

DATE: 4/01/03

SCALE: 3/32"=1'-0"

0 3/64 3/32"

REVISIONS:

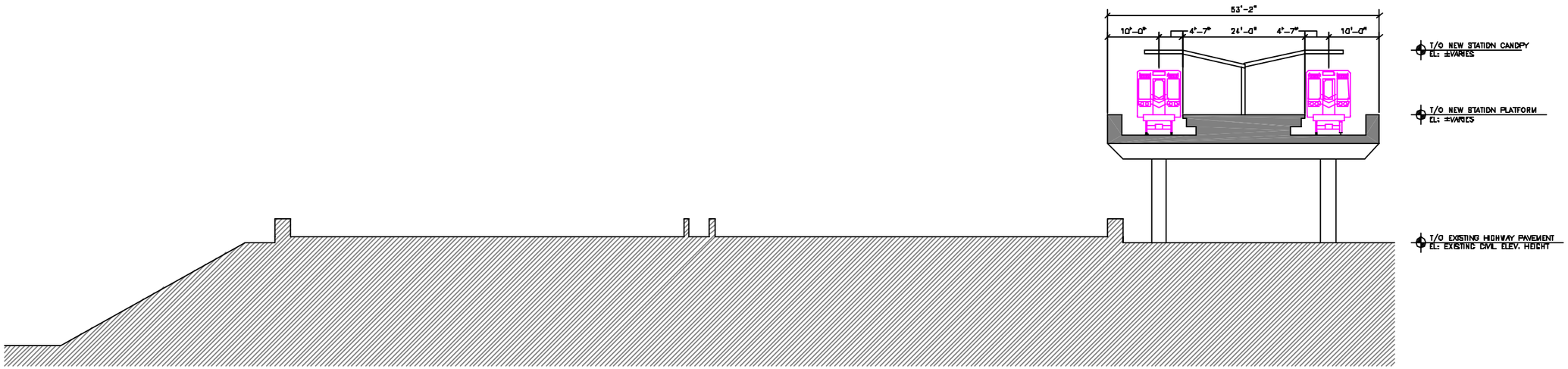
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

SCHAMBURG CONVENTION CENTER
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

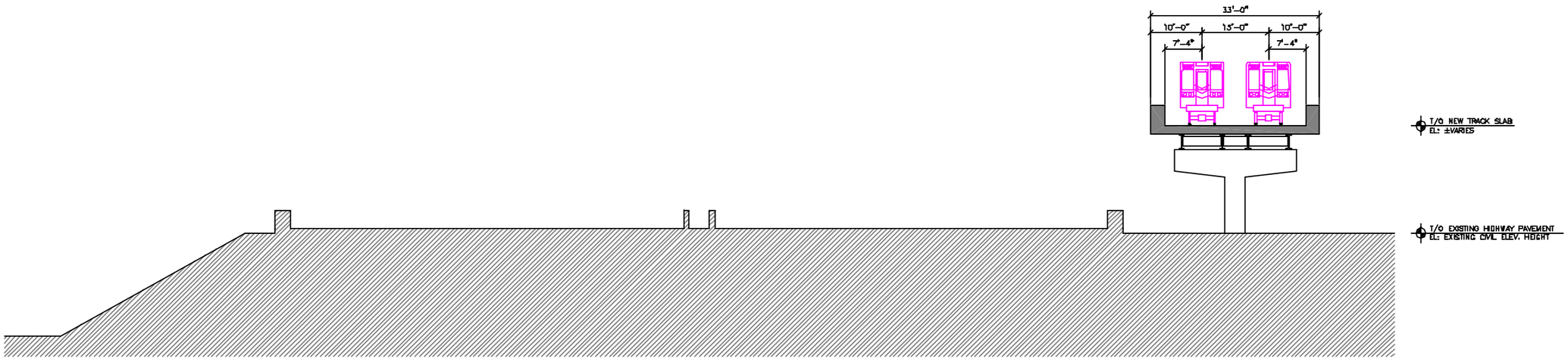
PLANNING AND DEVELOPMENT
FACILITIES PLANNING

AERIAL STRUCTURE SECTION

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\Section-2.dwg



STATION AT AERIAL STRUCTURE (TYP.)



AERIAL STRUCTURE (TYP.)

DATE: 4/01/03

SCALE: 3/32"=1'-0"

0 3/64 3/32"

REVISIONS:

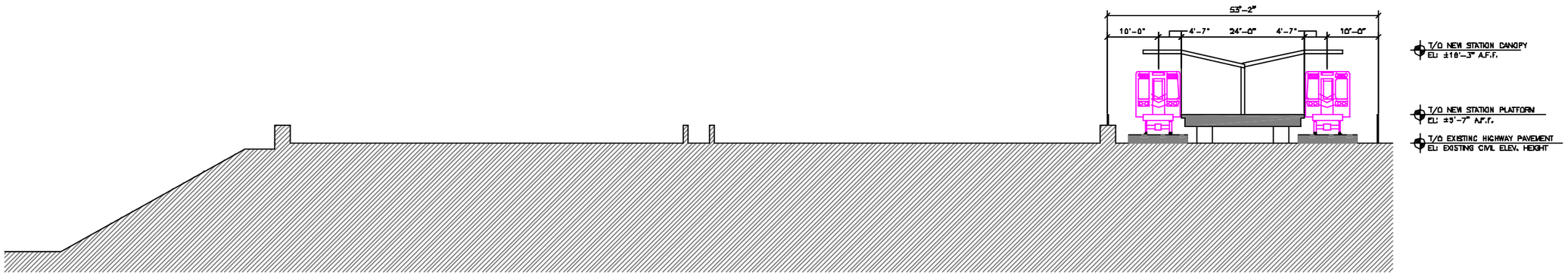
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

AERIAL STRUCTURE
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

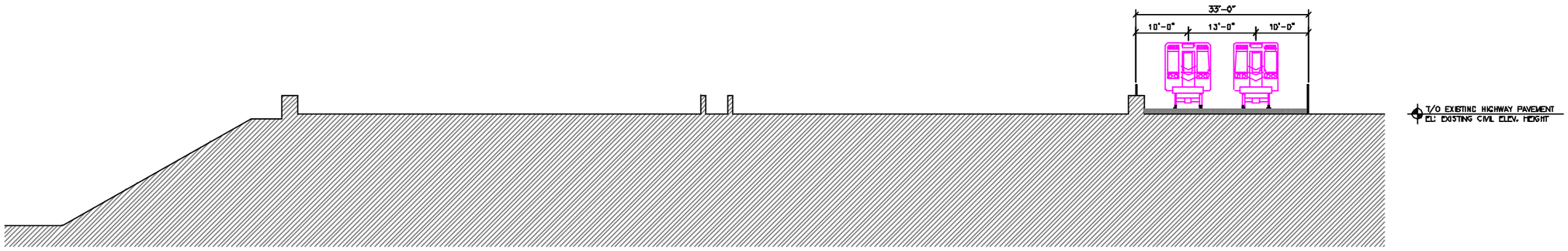
PLANNING AND DEVELOPMENT
FACILITIES PLANNING

AERIAL STRUCTURE SECTION

FILE LOCATION S:\Faceplan\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\Section-2.dwg



STATION AT-GRADE (TYP.)



AT-GRADE (TYP.)

DATE: 4/01/03

SCALE: 3/32"=1'-0"

0 3/64 3/32"

REVISIONS:

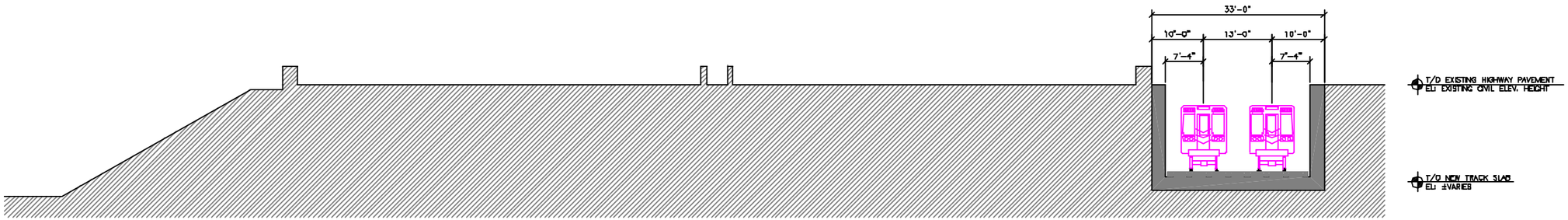
DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

AT-GRADE
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

AT-GRADE SECTION

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\Section-2.dwg



OPEN–CUT (TYP.)

DATE: 4/01/03

SCALE: 3/32"=1'-0"

0 3/16 3/32

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/01/03	AOL	RTA AERIAL MAP

OPEN-CUT
NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

PLANNING AND DEVELOPMENT
FACILITIES PLANNING

OPEN CUT SECTION

FILE LOCATION S:\Faction\Projects\Rails\Line Extensions\Schaumburg\RTA Working Group\Rail\Aerial\Section-2.dwg

Station Definition, Feeder Bus & Station Access Assumptions

A narrative and photographic description of each station includes an outline of Pace bus feeder service developed in cooperation with Pace, extent of park & ride facilities, intermodal facilities, pedestrian/roadway links to adjacent development, and estimated travel times within the line extension.

Station Design Criteria

- Center Island, 520-foot tangent platform (10-car trains).
- 24-foot wide minimum platform width.
- Vertical access includes escalator, stair and elevator.
- Automatic Fare Collection system of turnstiles and transit card vending machines, compatible with existing CTA equipment.

125 Proposed alignment on railroad right-of-way

Station Program
- o At-grade station
- o Bus transfer facility

Recommended Feeder Bus Service
- o Pace circulator service to adjacent industrial/commercial areas west of station
- o Pace arterial service on York/Elmhurst Road (serving Bensenville)

Estimated Travel Times
- o 13.75 minutes to Schaumburg-Convention Center
- o 1.75 minutes to O'Hare West

f West of station location on Devon Ave

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

ELK GROVE VILLAGE STATION
(NORTH ALIGNMENT)

D1

Station Program
- o Elevated station
- o Center platform
- o Bus transfer facility
- o Park & Ride for 1,000 vehicles

Recommended Feeder Bus Service
- o Pace circulator service to Des Plaines
- o Pace arterial service on Oakton and Elmhurst Roads

Estimated Travel Times
- o 11 minutes to Schaumburg-Convention Center
- o 4.5 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

DES PLAINES STATION
(NORTH ALIGNMENT)

D2

Station Program
- o Elevated station
- o Center platform
- o Bus transfer facility
- o Improved pedestrian connection at intersection of Busse Road and Higgins Road

Recommended Feeder Bus Service
- o Pace circulator service to adjacent employment centers and residential areas
- o Pace arterial service on Busse, Higgins, and Oakton Roads

Estimated Travel Times
- o 4.75 minutes to Schaumburg-Convention Center
- o 10.75 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

MOUNT PROSPECT STATION
(NORTH ALIGNMENT)

D3

Station Program
- o Elevated station
- o Center platform
- o Bus transfer facility
- o Park & Ride for 1,000 vehicles
- o Pedestrian connection to bus facility north of Tollway

Recommended Feeder Bus Service
- o Pace circulator service to adjacent employment centers and residential areas
- o Pace arterial service south from Arlington Heights community (utilizing bus facility north of Tollway)
- o Pace arterial service north from Elk Grove Village and Itasca (utilizing bus facility south of Tollway)

Estimated Travel Times
- o 6 minutes to Schaumburg-Convention Center
- o 9.5 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

ARLINGTON HEIGHTS STATION
(NORTH ALIGNMENT)

D4

Station Program
- o Elevated station
- o Center platform
- o Bus transfer facility
- o Pedestrian connection to north side of Tollway

Recommended Feeder Bus Service
- o Pace circulator service to adjacent employment centers
- o Pace arterial service connecting areas north of Tollway in Rolling Meadows and Golf Road

Estimated Travel Times
- o 7.5 minutes to Schaumburg-Convention Center
- o 8 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

ROLLING MEADOWS STATION
(NORTH ALIGNMENT)

D5

Station Program
- o Elevated station
- o Center platform
- o Bus transfer facility

Recommended Feeder Bus Service
- o Pace circulator service to Roosevelt University, Streets of Woodfield and adjacent employment centers
- o Pace arterial bus service between Woodfield Mall and surrounding communities

Estimated Travel Times
- o 2.75 minute to Schaumburg-Convention Center
- o 12.75 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

SCHAUMBURG - WOODFIELD MALL
(NORTH ALIGNMENT)

D6

Station Program
- o Elevated station
- o Two platforms
- o Intermodal BRT - HRT facility

Recommended Feeder Bus Service
- o Pace circulator service to adjacent employment and retail centers
- o Two Pace BRT routes: one west to Elgin on I-90, one north-south on I-53/290/355

Estimated Travel Times
- o 15.5 minutes to O'Hare West

Note: Assuming reconfiguration of Meacham Road and Tollway occur as part of programmed Meacham Road widening and planned new Tollway interchange.

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

SCHAUMBURG CONVENTION/TRANSIT CENTER
(NORTH ALIGNMENT)

D7

Station Definition, Feeder Bus & Station Access Assumptions

South Alignment

k. Proposed station location on Thorndale Road

Station Program
- o Elevated station
- o Bus transfer facility
- o Park & Ride for 1,000 vehicles

Recommended Feeder Bus Service
- o Pace circulator service to adjacent commercial/industrial and residential areas
- o Pace local bus service on Busse Road

Estimated Travel Times
- o 13 minutes to Schaumburg-Convention Center
- o 2 minutes to O'Hare West

g Local street north of station location

DATE: 4/10/03	REVISIONS:			NORTHWEST CORRIDOR PHASE II ALTERNATIVES ANALYSIS	cta PLANNING AND DEVELOPMENT FACILITIES PLANNING	D1s
	DATE	INITIALS	DESCRIPTION		BENSENVILLE - WOOD DALE STATION (SOUTH ALIGNMENT)	
	4/10/03	AM	SOUTH ALIGNMENT			

Station Program
- o Elevated station
- o Bus transfer facility
- o Park & Ride for 1,000 vehicles

Recommended Feeder Bus Service
- o Pace circulator service to commercial/industrial area north and residential area south of station
- o Pace arterial bus service on Arlington Heights Road

Estimated Travel Times
- o 10.5 minutes to Schaumburg-Convention Center
- o 4.5 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	SOUTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

ITASCA STATION
(SOUTH ALIGNMENT)

D2s

Station Program
- o Elevated station
- o Bus transfer facility
- o Park & Ride for 1,000 vehicles

Recommended Feeder Bus Service
- o Pace circulator service from residential area west of station
- o Pace arterial bus service on Rohlwing Road to Itasca and Spring Lake Industrial Parks

Estimated Travel Times
- o 7.5 minutes to Schaumburg-Convention Center
- o 7.5 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	SOUTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

ELK GROVE VILLAGE STATION
(SOUTH ALIGNMENT)

D3s

Station Program
- o Elevated station
- o Bus transfer facility

Recommended Feeder Bus Service
- o Pace circulator service from residential area west of station
- o Pace circulator service from Streets of Woodfield and commercial complexes north of station
- o Pace arterial service on Higgins Road

Estimated Travel Times
- o 10.25 minutes to Schaumburg-Convention Center
- o 4.75 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	SOUTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

HIGGINS ROAD STATION
(SOUTH ALIGNMENT)

D4s

Station Program
- o Elevated station
- o Center platform
- o Bus transfer facility

Recommended Feeder Bus Service
- o Pace circulator service to Roosevelt University, Streets of Woodfield and adjacent employment centers
- o Pace arterial bus service between Woodfield Mall and surrounding communities

Market Targets
- o Woodfield Mall and surrounding retail employees and customers
- o Roosevelt University employees and students

Estimated Travel Times
- o 2.75 minute to Schaumburg-Convention Center
- o 12.25 minutes to O'Hare West

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	SOUTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

SCHAUMBURG - WOODFIELD MALL
(SOUTH ALIGNMENT)

D5s

Station Program
- o Elevated station
- o Two platforms
- o Intermodal BRT - HRT facility

Recommended Feeder Bus Service
- o Pace circulator service to adjacent employment and retail centers
- o Two Pace BRT routes: one west to Elgin on I-90, one north-south on I-53/290/355

Estimated Travel Times
- o 15 minutes to O'Hare West

Note: Assuming reconfiguration of Meacham Road and Tollway occur as part of programmed Meacham Road widening and planned new Tollway interchange.

DATE: 4/10/03

REVISIONS:

DATE	INITIALS	DESCRIPTION
4/10/03	AM	NORTH ALIGNMENT

NORTHWEST CORRIDOR PHASE II
ALTERNATIVES ANALYSIS

cta PLANNING AND DEVELOPMENT
FACILITIES PLANNING

SCHAUMBURG CONVENTION / TRANSIT CENTER
(SOUTH ALIGNMENT)

D6s